

**REMARKS / ARGUMENTS**

Claims 1-40 are pending in the instant application. Claims 1, 21 and 32 are independent. Claims 2-20, 22-31 and 32-40 depend directly or indirectly from independent claims 1, 21, and 32, respectively.

Claims 1-10, 14-20, and 24-31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admission of Prior Art ("APA") in view of USP 5,123,008 ("Beesley").

Claims 11-13, 22-23 and 32-40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over APA and Beesley, in view of USP 5,794,131 ("Cairns").

The Applicant respectfully traverses these rejections at least based on the following remarks.

### **REJECTION UNDER 35 U.S.C. § 103**

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure, Rev. 6, Sep. 2007 ("MPEP") states the following:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

See the MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), and *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). Further, MPEP § 2143.01 states that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art" (citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007)). Additionally, if a *prima facie* case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

**I. The Proposed Combination of APA and Beesley Does Not Render Claims 1-10, 14-20 and 24-31 Unpatentable**

**A. Independent Claims 1 and 21**

With regard to the rejection of independent claim 1 under 35 U.S.C. § 103(a), the Applicant submits that the combination of APA and Beesley does not disclose or suggest at least the limitation of “generating, in a transmitter, a local oscillator (LO) signal at a particular frequency, ...and attenuating, in said transmitter, said selected frequency content disposed in said region around the LO harmonic frequency,” as recited in Applicant’s claim 1.

In the Office Action, the Examiner relies on APA to disclose a LO in a transmitter generating a particular frequency, with a LO harmonic frequency. The Examiner concedes the following:

“APA fails to teach attenuating in said transmittersaid selected frequency content disposed in said region around the LO harmonic frequency which is taught in the same field of endeavor by Beesley (Fig. 1, col. 3, lines 25-50”

See the Office Action at page 4. The Examiner relies for support on Beesley in Fig. 1 to disclose APA’s deficiencies, namely, “attenuation, ...the selected frequency content disposed around the LO harmonic frequency.”. Specifically, the Examiner relies on the following citation of Beesley:

“The transmit signal path will now be described. The data processor 19 is used to prepare a digital data signal from the input analog (speech) waveform. The data output from data processor 19 is applied to a shaping filter 20 where it is filtered before being applied

to the crystal oscillator 11 to frequency modulate same. Typically the Cm. deviation is +/-500 Hz which latter is multiplied by 5 in multiplier 13 to give an output deviation of +/-2.5 KHz. The sixth harmonic of this signal is used to frequency modulate a main phase lock loop 21. including the oscillator 6, as will be described in detail below. By this time the total deviation is  $6 \times 2.5 = \pm 15$  KHz. For transmit the oscillator 6 is switched by means of a switch S3 to a frequency of 866.05 MHz. The output of oscillator 6 is buffered, as before by buffer amplifier 8 and is amplified in power amplifier 22. The output of power amplifier 22 is passed via filter 2 to aerial 1. **An anti-splatter attenuator 23 is switched into circuit on transmit by switch S4 and is operable to provide slow (10 $\mu$ S) transients to the transmitter on/off switching action so as to reduce the splattering by the transmitter amplitude modulated sidebands into adjacent channels."**

See Beesley at col. 3, lines 25-50 (emphasis added). The Examiner alleges that Beesley's attenuator 23 is for "attenuating, in said transmitter, said selected frequency content disposed in said region around the LO harmonic frequency," as recited in Applicant's claim 1.

The Applicant respectfully disagrees and points out that Beesley discloses "**sidebands**", which are caused by "**amplitude modulation (AM)**", are splattered (leaked) into adjacent transmission channels. In other words, such **sidebands are generated due to amplitude modulation by the processor 19**, and **not** from the LO signal generation itself.

Moreover, Beesely's AM sidebands, which are splattered into the adjacent transmission channels, are around LO frequencies (i.e., **around 866.05 MHz**). In other words, the AM sidebands are **not at the harmonic frequencies of the LO**, which are at integer multiples of 866.05 MHz (e.g., 1732.1 MHz, 2598.15 MHz,

etc.). Therefore, Beesley's attenuator 23 is not for "attenuating, ...the selected frequency content disposed around the LO harmonic frequency," as recited in Applicant's claim 1.

Base on the foregoing rationale, the Applicant maintains that Beesley does not overcome APA's above deficiencies, and a prima facie case of obviousness cannot be established by the combination of APA and Beesley, and the rejection of independent claim 1 under 35 U.S.C. § 103(a) should be withdrawn. Applicant's claim 1 is therefore submitted to be allowable.

Independent claim 21 is similar in many respects to independent claim 1. Therefore, the Applicant respectfully submits that claim 21 is also allowable at least for the reason stated above with regard to claim 1.

**B. Dependent Claims 2-10, 14-20 and 24-31**

Dependent claims 2-10, 14-20 and 24-31 depend directly or indirectly from independent claims 1 and 21, respectively. Consequently, claims 2-10, 14-20 and 24-31 are submitted to be allowable at least for the reasons stated above with regard to claim 1.

**II. The Proposed Combination of APA, Beesley and Cairns Does Not Render Claims 11-13, 22-23 and 32-40 Unpatentable**

The Applicant now turns to the rejection of claims 11-13, 22-23 and 32-40 as being unpatentable over APA and Beesley in view of Cairns.

**A. Rejection of Dependent Claims 11-13 and 22-23**

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1 and 21 under 35 U.S.C. § 103(a) as being unpatentable by the combination of APA and Beesley has been overcome and requests that the rejection be withdrawn. Cairns does not overcome the deficiencies of APA and Beesley. Additionally, claims 11-13 and 22-23 depend directly or indirectly from independent claims 1 and 21, respectively, and are, consequently, also respectfully submitted to be allowable.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 11-13 and 22-23.

**B. Independent Claim 32**

With regard to the rejection of independent claim 32 under 35 U.S.C. § 103(a), the Examiner relies for support on Cairns to disclose a buffer to buffer the LO signal. However, the Examiner's argument is still deficient, since Cairns still does not disclose or suggest "attenuate said selected frequency content disposed

in said region around the LO harmonic frequency,” as recited in Applicant’s claim 32. In other words, Cairns does not overcome the deficiencies of APA and Beesley.

Claim 32 is submitted to be allowable, and the Applicant respectfully requests that the rejection of claim 32 under 35 U.S.C. § 103(a) be withdrawn.

**C. Rejection of Dependent Claims 33-40**

Based on at least the foregoing, the Applicant believes the rejection of independent claims 32 under 35 U.S.C. § 103(a) as being unpatentable by APA and Beesley in view of Cairns has been overcome and requests that the rejection be withdrawn. Additionally, claims 33-40 depend directly or indirectly from independent claim 32, respectively, and are, consequently, also respectfully submitted to be allowable.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 1-40.

**CONCLUSION**

Based on at least the foregoing, the Applicant believes that all claims 1-40 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and requests that the Examiner telephone the undersigned Patent Agent at (312) 775-8093.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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